PATENT ABSTRACTS OF JAPAN

(11)Publication number:

09-199769

(43) Date of publication of application: 31.07.1997

(51)Int.CI.

H01L 43/08 G01R 33/09 G11B 5/127 G11B 5/39

(21)Application number : **08-007703**

(22)Date of filing:

(71)Applicant: FUJITSU LTD

19.01.1996

(72)Inventor: **ODAGIRI MITSURU**

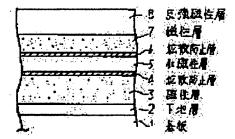
KOBAYASHI KAZUO

(54) MAGNETORESISTIVE EFFECT ELEMENT AND MAGNETIC SENSOR

(57) Abstract:

PROBLEM TO BE SOLVED: To improve heat resistivity and environment resistance of a magnetoresitive effect element having a laminated structure of magnetic and non-magnetic layers.

SOLUTION: Diffusion preventing layers 4, 6 of Ag are provided between a non-magnetic layer 5 of Cu and magnetic layer 3, 7. The non-magnetic layer 5 is a multi-layer film formed of a thin Cu film and a thin Ag film. Aggregation due to heat treatment does not take place because the thin Ag film is in close contact with the Cu layer. Moreover, Ag makes a good diffusion preventing layer. A large magnetoresistive effect is obtained because Cu is used for the non-magnetic layer 5, and heat resistance is improved because the Ag layer is included. Further, corrosion resistance is improved by providing a corrosion resistive thin metal film between the layers of the multi-layer film.



LEGAL STATUS

[Date of request for examination]

Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

2778626

[Date of registration]

08.05.1998

[Number of appeal against examiner's decision of

rejection]

[Date of requesting appeal against examiner's

decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office